

Remarks

Claims 1-26 are pending in the application. Claims 1, 9 and 17 are rejected; claims 2-8 and 10-16 are objected to; and claims 18-26 are allowed. Based on the following, reconsideration of the claim rejections is requested.

Claim Rejections—35 U.S.C. § 103

The Examiner rejected claims 1, 9 and 17 under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6,233,508 (Deguchi et al.). With regard to claims 1 and 9, Applicants respectfully disagree with the Examiner's interpretation of the Deguchi et al. reference. For example, claim 1 of the present application recites a method for controlling a hybrid powertrain system that includes the step of "determining a first power state of the hybrid powertrain system...." With reference to this claim limitation, the Examiner cites to Figure 9 in Deguchi et al. Similarly, the Examiner cites to Figure 9 with regard to the next limitation recited in claim 1, "limiting electrical power generated by the generator to the minimum of the rated power limit of the generator and the first power state...." Claim 1 further recites that this "limiting" step occurs "when the first power state is greater than zero...." Applicants submit that these limitations are neither taught nor suggested by Deguchi et al.

Figure 9 in Deguchi et al. includes a number of graphs that illustrate vehicle parameters for a fixed amount of generator electrical output and a fixed accelerator pedal position. Applicants note that neither the drawing figure, nor the text of the specification in Deguchi et al., indicate that the generator electrical output is in any way limited by a system or method. Rather, Figure 9—and Figures 10 and 11—merely "show the simulation result of control characteristics under different running conditions." (Col. 7, ll. 4-5.) Thus, the generator amount of 10kw in Figure 9 and 0kw in Figure 10 provide different running conditions of the vehicle for which parameters such as accelerator aperture, vehicle speed, input rotation speed, etc., are shown. There is nothing to indicate that the drive power control device of Deguchi et al. limits the amount of electrical power generated by the generator as is

expressly recited in claim 1 of the present application. As described in the specification of the present application, the invention provides a system and method for battery protection strategy, and implementing such a strategy may include limiting the electrical power generated by the generator so as to avoid an overcharge condition. Deguchi et al. does not discuss or illustrate applying a limitation to the amount of electrical power generated by the generator.

Claim 1 of the present application further recites the step of "limiting the electrical power generated by the generator to zero, and limiting the power limit of the electric machine during generating to a first operating condition of the hybrid powertrain system...." This step is executed "when the first power state is less than or equal to zero." As discussed above, Deguchi et al. does not teach or suggest the step of limiting the electrical power generated by the generator. In addition, Deguchi et al. does not teach or suggest the limitations of limiting the power limit of the electric machine as expressly recited in claim 1 of the present application. Instead, Figure 10 in Deguchi et al. illustrates a number of vehicle operating parameters during a specific running condition of the vehicle—the running condition wherein the generator output happens to be 0kw. In Figures 9 and 11, the generator output happens to be 10kw. The running conditions used for illustration purposes in Figures 9-11 are not limits imposed on generator or motor output, and the limitations of claim 1 are not taught or suggested by Deguchi et al.

In sum, claim 1 of the present application includes steps that limit the amount of electrical power generated by a generator, and limit the power limit of an electric machine, to different values depending on a first power state which is determined in another step of the method. Deguchi et al. does not teach or suggest the application of such limitations either to a generator, or an electric machine, and certainly not to the combination of the two under the different operating conditions as expressly recited in claim 1 of the present application. Claim 9 of the present application recites a system for controlling a hybrid powertrain, which includes a controller that is configured to execute steps similar to those recited in the method of claim 1. Claim 17 depends directly from claim 9, and therefore contains all of the limitations of claim 9, as well as additional limitations that further distinguish it from the cited reference.

Therefore, with regard to claims 1, 9 and 17, Applicants respectfully submit that the MPEP requirements for establishing a *prima facie* case of obviousness have not been met.

Allowable Subject Matter

Applicants thank the Examiner for the allowance of claims 18-26. The Examiner objected to claims 2-8 and 10-16 as being dependent upon a rejected base claim, but indicated that each would be allowable if rewritten in independent form to include all of the limitations of its respective base claim and any intervening claims. As discussed in detail above, base claims 1 and 9 are believed to be allowable, and therefore, Applicants respectfully request the objections to claims 2-8 and 10-16 to be withdrawn.

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Respectfully submitted,

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